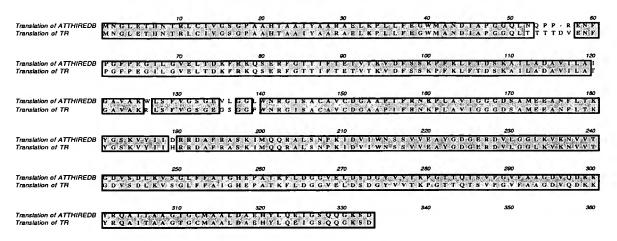


ClustalW Formatted Alignments

	10	· i	20	30	40	50	60
TR ATTHIREDB	A TG A A TG GT C	T C G A A A C T	CACAACACAA	G G C T C T G T A T	CGTAGGAAGT	GGCCCAGCGG	
ATT III LOD	A I GARATO GIA	IGGAAACI	CHACAN CA CAN	O O C LI CALEGIA I	CULAGOAAGE	WO C C A D C G U	C A
TR.	C A CHARDEGE C C C	C-GUATET TOTAL	GUAGUTAGGU	90 FCTGAACITAA	100 A C C I C I I C I C	III CGAAGGAI	.G.G
ATTHIREDB		CGATTTAC	GCAGCTAGG	CT GAACTTAA	ACCTCTTCTC	TTCGAAGGAT	
	190		140	150	180	170	180
TR	ATGGCTAACG	ACATCGCT			CACCACCGAC	GTCGAGAATT	TC
ATTHIREDB	ATGGCTAACG	A C A T C G C T	CCCGGTGGT	CAACT CAAC	CAACCACCG	GT C G A G A A T T GT G A G A A T T	T C
	190		200	210	220	230	240
TR	C C C G G A T T T C C	CAGAAGGT	ATTCTCGGAC	TAGAGCTCAC	TGACAAATTC	CGTAAACAAT	C G
ATTHIREDB	CCCGGATTTC	CAGAAGGT	ATTCTCGGAC	TAGAGCTCAC	TGACAAATTC	CGTAAACAAT	CG
	250		260	270	280	290	300
TR ATTHIREDB	GAGCGATTCG	GTACTACG	ATATTTACAC	AGACGGTGAC	GAAAGTCGAT	TTCTCTTCGA	
ATTHIREUB	GAGCGATTCG	GTACTACG	ATATTTAGAC	AGACGGTGAC	GAAAGTCGAT	TIL CT CT C G A	ΑΑ
_	310		320	330	340	350	360
TR ATTHIREDB	C C G T T T A A G C	TATT CACA	GATTCAAAA	CCATTCTCGC	TGACGCTGTG	ATTCTCGCTA	СТ
ATTIMEDO	C C O : I : I R A O C	Industrial CACA	U A I I C A A A A C	C C A T SECOND G C	TORCOCIOIG	AITCICOCIA	l, c
TE	G C A G C T C T C C	O TO A A CIC C C	380 C-T-T-A-C-C-T-T-C-C	TTGGATCTGG	TGAAGGTTCT	G C A C C T T T C T	420 G. G
ATTHIREDB	GGAGCTGTGG	CTAAGT GG	CTTAGCTTC	TTGGATCTGG	Т СА А СПТС ТС	GGAGGTTTGIT	GG
					S SHOULD LANGUAGE.	1745U_V_0_01_01_01_01_01_01_01_01_01_01_01_01_0	
	420		440	450	460	470	480
TR	AACCGTGGAA	CTCCGCT		GCGACGGAGC	TGCTCCGATA	TTCCGTAACA	
ATTHIREDB						TTCCGCAACA	
	490		500	510	520	530	540
TR	CCTCTTGCGG	T G A T C G G T	G G A G G C G A T 1	CAGCAATGGA	A G A A G C A A A C	TT T C T T A C A A	A, A
ATTHIREDB	CCTCTTGCGG	T G A T C G G T	GGAGGCGATT	CTGCAATGGA	AGAAGCAAAC	TTTCTTACAA	AA
	550		560	570	580	590	600
TR ATTHIREDB	TATEGATETA.	AAGTGTAT	ATAATCCATA	GGAGAGATGC	TTTTAGAGCG	TCTAAGATA	TG
ATTHIREDB	TATGGATCTA	AGTGTAI	ATAATCGATA	GGAGATGU	TITAGAGCG	TC I A A G A T I A	LG
	610		620	630	640	650	660
ATTHIREDB	CAGCAGCGAG			TT GATGTGAT			A 4 A
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		YUMBER AND TO SEE	A A C C C C C C C C C C C C C C C C C C	III Can in Constitution in the	1.1.02011.11 0.1.0.0	1,0,1,0,1,1,0,1,0,1,0,1,0,1,0,1,0,1,0,1	34.11
	670		600	000	700	740	700
TR		STEE CONTRACTOR	680	690	700	AATGTGGTTA	720
ATTHIREDB	GCTTATGGAGA	TGGAGAA	AGAGATGTGC	TTGGAGGATT	GAAAGTGAAG	AATGTGGTTA	CC
	730		740	750	760	770	780
TR		CTGATTA				CATGAGCCAG	
ATTHIREDB	G G A G A T G T T T (CTGATTTA	AAAGTTTCTG	GATT GTTCTT	TGCTATTGGT	CATGAGCGAG	C.T
	790		800	810	820	830	840
TR	A C C A A G T T T T T	GGATGGT.	GGTGTTGAGT	TAGATTCGGA	TGGTTATGTT	GTCACGAAGC	C T
ATTHIREDB	A C C A A G T T T T	r G G A T G G T	GGTGTTGAGT	TAGATTCGGA	TGGTTATGTT	GTCACGAAGC	C T
_	850		BEU	8/0	880	890	SUU
IR ATTIMIDEDO	GGTACTACAC	CGACTAGE	GILCCCGGAG	11,110,460,60	GGGTGATGTT	CAGGATAAGA	
ALIMINEUB	G G T A C T A C A C A	GACTAGE	G 1 1 C C C G G A G	TTTCCCCTCC	GGGGGATGTT	CAGGATAAGA	A G
	910		920	930	940	950	960
IH ATTHIREDB	TATAGGCAAGG	CATCACT.	G CT G C A G G A A	CTGGGTGCAT	GGCAGCTTTG		^ - I
	Go Genen Get		S SELECTOR OF CASA	COLUMN TERROR AND	· GO BU C I I I U	O MOI O O A O A O A	CALLER.
					•		
TR	970		SEC T C A C C A A C	990 FGTAA-GA-GT-GA	1000	1010	1020
ATTHIREDB			TCTCAGCAAG				

1	ATG	ААТ	GGT	СТС	GAA	ACT	CAC	AAC	ACA	AGG	CTC	TGT	ATC	GTA	GGA	AGT	GGC	CCA	GCG	GCA	60
1	М	N	G	L	E	Т	Н	N	Т	R	L	С	I	V	G	S	G	P	Α	Α	20
61	CAC	ACG	GCG	GCG	ATT	TAC	GCA	GCT	AGG	GCT	GAA	CTT	AAA	CCT	CTT	CTC	TTC	GAA	GGA	TGG	120
21	Н	Т	A	A	I	Y	A	A	R	A	E	L	K	P	L	L	F	Ē	G	W	40
121	ATG	GCT	AAC	GAC	ATC	GCT	CCC	GGT	GGT	CAA	CTA	ACA	ACC	ACC	ACC	GAC	GTC	GAG	AAT	TTC	180
41	М	A	N	D	I	A	P	G	G	Q	L	Т	Т	Т	Т	D	V	Ė	N	F	60
181	CCC	GGA	TTT	CCA	GAA	GGT	ATT	CTC	GGA	GTA	GAG	CTC	ACT	GAC	AAA	TTC	CGT	AAA	CAA	TCG	240
61	P	G	F	P	E	G	I	L	G	V	E	L	Т	D	K	F	R	K	Q	s	80
241	GAG	CGA		GGT	ACT	ACG			ACA								TTC				300
81	Е	R	F	G	Т	Т	Ι	F	Т	E	Т	V	Т	K	V	D	F	S	S	K	100
	CCG									GCC		CTC	GCT						GCT		360
101	P	F	K	L	F	Т	D	S	K	A	Ι	L	A	D	A	V	I	L	Α	T	120
	GGA																			TGG	420
121		A	V	Α	K	R	L	S	F	V	G	S	G	E	G	S	G	G	F	W	140
	AAC																				480
141		R	G	Ι	S	A	С	A	V	С	D	G	Α	A	P	Ι	F	R	N	K	160
	CCT																				540
161		L	Α	v	I	G	G	G	D	S	A	M	E	E	A	N	F	L	Т	K	180
	TAT																				600
181		G	S	K	V	Y	I	I	Н	R	R	D	A	F	R	А	S	K	I	M	200
201	CAG	Q	R	A	L	S	N N	P	K	I	D	V	I	W	N N	S	S	V	V GIG	E	660 220
	GCT																				720
221		Y	G	D	G	E	R	D	V	L	G	G	L	K	V	K	N	V	V	Т	240
721 241	GGA		V	TCT S	GAT D				S									GAG E	P		780 260
						L	K	V		G	L	F	F	A	I	G	Н			A	
781 261	ACC																				840
					D	G		V	E	L	D	S	D		Y	V	V	T	K	P	280
	GGT																				900
281		T		-						v				G	D	V	-	D		K	300
	TAT																				960
	Υ		-												A	L	D	A	E	Н	320
	TAC																				1002
321	Y	Ĺ	0	E	I	G	S	0	0	G	K	S	D	*							334

ClustalW Formatted Alignments



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1	L <u>ct</u>	gcag	gaat	tcat	tgta	ctccc	agta	tcat	tata	agtg	aaag	tttt	ggcto	etete	gccg	gtgg	tttt	ttac	ctct	attta	80
81	Laa	8888.	tttt	ccac	ctaaa	aaatt	ctgg	rtato	atto	ctca	ettt	actt	gttac	ttta	attt	ctca	taat	cttt	ggtt	gaaat	160
161	. tai	cac	gctt	ccgca	acacç	gatat	ccct	acaa	attt	atta	attt	gttaa	acat	tttc	aaac	cgca	taaa	attt	tatg	aagtc	240
241	. cc	gteta	atcti	taat	gtag	gtcta	acat	tttc	atat	tgaa	atai	tataa	ttte	ctta	attt	tago	gttg	gtag	aaag	cataa	320
321	. tga	attta	atte	tatt	ctto	ettca	tata	aatg	ttta	atat	aca	atata	aaca	aatt	cttt	acct	taag	aagg	attt	cccat	400
401	. tt1	tatai	tttt	aaaa	tata	attta	tcaa	atat	tttt	caac	cac	gtaaa	tete	ataa	taat	aagt	tgtt	tcaa	aagt	aataa	480
481	. aat	tta	actc	catas	tttt	ttta	ttcg	actg	atct	taaa	agca	acaco	cagt	gaca	caac	tagc	catt	tttt	tctt	tgaat	560
561	. aaa	aaaa	atcca	aatta	tcat	tgta	tttt	tttt	atac	aatç	gaaa	attt	acca	aaca	atca	tttg	tggt	attt	ctga	agcaa	640
641	gto	atg	ttat	gcaaa	atto	tata	atto	ccat	ttga	cact	acg	gaagt	aact	gaag	atct	gctt	ttac	atgc	gaga	cacat	720
721	ctt	cta	aagta	aattt	taat	aata	gtta	ctat	atto	aaga	attt	catat	atca	aata	ctca	atat	tact	tcta	aaaa	attaa	800
801	tta	agata	ataat	taaa	atat	tact	tttt	taat	ttta	agtt	taat	ttgtt	gaat	ttgt	gact	attg	attt	atta	ttct	actat	880
881	gtt	taa	attgi	ttte	taga	tagt	ttaa	agta	aata	taag	gtaat	tgtag	gtaga	gtgt	taga	gtgt	tacc	ctaa	acca	taaac	960
961	. tat	aaga	attta	atggt	ggac	taat	tttc	atat	attt	ctta	attgo	cttt	acct	tttc	ttgg	tatg	taag	tccg	taac	tggaa	1040
1041	tta	ctgt	gggt	tgcc	atgg	cact	ctgt	ggtc	tttt	ggtt	cato	gcatg	gatg	cttg	cgca	agaa	aaag	acaa	agaa	caaag	1120
1121	aaa	aaag	jacas	aaca	gaga	gaca	aaac	gcaa	tcac	acas	ccaa	actca	aatt	agtc	actg	gctg	atca	agat	cgcc	gegte	1200
1201	cat	gtat	gtct	aaat	gcca	tgca	aagc	aaca	cgtg	rctta	acat	gcac	ttta	aatg	gctc	accc	atct	caac	ccac	acaca	1280
1281	aac	acat	tgcc	tttt	tctt	catc	atca	ccac	aacc	acct	gtat	tatat	tcat	tctc	ttcc	gcca	cctc	aatt	tctt	cactt	1360
1361	cas	Caca	cgto	aacc	tgca	tatg	cgtg	tcat	CCCE	tgco	caas	atcto	catg	catg	ttcc	aacc	acct	tete	tctt	atata	1440
1441	ata	ccta	taas	tacc	tcta	atat	cact	cact	tett	tcat	cato	ccato	cato	caga	gtac	tact	actc	tact	acta	taata	1520
1521 1	CCC	caac	ccaa	ctcat	atto	aata	ctac	tcta			A A	TCG (GAA (E							TGC C	1587 11
1588		ACC	GTT	GAG	ACA	TGG	AAC	GAG	CAG	СТТ	CAG	AAG	GCT	AAT	GAA	TCC	AAA	ACT	СТТ	GTG	1647
12		T	v	E	T	W		E	_		Q	ĸ		N	E	s	ĸ	T	L	v	31
1648 32		GTT V	GAT D	TTC F	ACG T	GCT A	TCT S	TGG W	TGT C	GGA G	P CCA		CGT R	TTC F	ATC I	GCT A	CCA P	TTC F	TTT F	_GCT A	1707 51
1708																					1767
57	n	T.	A.	E	TZ	т.	Ð	N	17	т.	7	T.	~	37	ח	- Tr	D.	₽.	т.	ĸ	71

FIGURE 6 (CONT'D)

768	TCG	GTG	GCA	AGT	GAT	TGG	GCG	ATA	CAG	GCG	ATG	CCA	ACC	TTC	ATG	TTT	TTG	AAG	GAA	GGG	1827
72	s	v	A	s	D	W	A	I	Q	A	M	P	T	F	M	F	L	K	E	G	91
.828	AAG			GAC											CAG						1887
92	K	I	L	D	K	V	v	G	A	K	K	D	E	L	Q	S	T	I	A	K	111
				Hind																	
1888	CAC	TTG	GCI	TAI	gct	taat	aagt	atga	acta	aaat	gcat	gtag	gtgt	aaga	gctc	atgg	agag	catgo	gaata	ttgt	
112	H	L	A	*																	115
1964	ato	cgac	catg	taac	agta	taat	aact	gagc	tcca	tete	actt	cttc	tatga	aata	Baca	aagga	atgtt	atga	tata	ttaa	2043
2044	cac	tcta	tcta	tgca	cctt	attg	ttct	atga	taaa	tttc	ctct	tatt	attai	taaa	tcato	etgas	atcgt	gacg	gctt	atgg	2123
2124	aat	gctt	caaa	tagt	acaa	aaac	aaat	gtgt	acta	taag	actt	tcta	aaca	attc	taacı	ttag	gcatt	gtga	acga	gaca	2203
2204	taa	gtgt	taag	aaga	cata	acaa	ttat	aatg	gaag	aagt	ttgt	ctcc	attt	atat	attat	atat	taco	cact	tatg	tatt	2283
2284	ata	ttag	gatg	ttaa	ggag	acat	aaca	atta	taaa	gaga	gaag	tttgi	tatc	catt	tatat	atta	atata	ctac	ccat	ttat	2363
2364	ata	ttat	actt	atcc	actt	attt	aatg	tctt	tata	aggt	ttga	tccai	tgata	attt	ctaat	tatt	tagt	tgat	atgt	atat	2443
2444	gaa	aggg	rtact	attt	gaac	tctc	ttac	tctg	tata	aagg	ttgg	atca	tccti	taaa	gtggg	gtcta	attta	attt	tatt	gctt	2523
2524	ctt	acag	ataa	aaaa	aaaa	ttat	gagt	tggt	ttga	taaa	atati	tgaag	ggati	ttaa	aatas	ataat	aaat	aata	aata	acat	2603
2604	ata	atat	atgt	atat	aaat	ttat	tata	atat	aaca	ttta	tcta	taaa	aaagt	taaa	tatto	gtcat	aaat	ctat	acaa	tcgt	2683
2684	tta	gcct	tgct	ggac	gact	ctca	atta	ttta	aacg	agag	taaa	cata	tttga	actt	tttgg	gttat	ttas	caas	ttat	tatt	2763
2764	taa	cact	atat	gaaa	tttt	tttt	tttt	atcg	gcaa	ggaa	ataa	aatt	aaati	tagg	aggga	caat	ggtg	gtgto	ccaa	teet	2843
2844	tat	acaa	ccaa	cttc	caca	ggaa	ggtc	aggt	cggg	gaca	acaa	aaaa	acag	gcaa	gggaa	aattt	ttta	attt	gggt	tgtc	2923
2924	ttg	tttg	ctgo	ataa	ttta	tgca	gtaa	aaca	ctac	acat	aacc	cttt	tagc	agta	gagca	atgg	gttga	ccgt	gtgc	ttag	3003
3004	ctt	cttt	tatt	ttat	tttt	ttat	cagc	aaag	aata	aata	aaat	aaaa	tgag	acac	ttcag	ggat	gttt	caac	cctt	atac	3083
084	aaaa	ccc	aaaa	acaa	gttt	ccta	gcaco	ctac	caac	taag	gtac	<u>c</u>									3129

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1	L_ct	gcagg	gaatt	catt	gtac	taca	agta	tcat	tata	gtga	aagt	tttg	gctc	tctc	gccg	gtgg	tttt	ttaco	ctcta	attta	80
8:	l aa	aaaa.	tttt	ccac	ctaas	aatt	ctgg	tato	atto	tcac	ettta	actto	ttac	ttta	attt	ctca	taat	cttt	ggttg	gaaat	160
161	Ltai	tcac	gette	ccgca	acacç	gatat	ccct	acaa	attt	atta	tttg	gttaa	acat	tttc	aaac	cgca	taaa	attti	tatga	agtc	240
241	L ccs	gtcta	atcti	taat	gtag	,tcta	acat	tttc	atat	tgaa	atat	ataa	ttta	ctta	attt	tagc	gttg	gtaga	aaago	cataa	320
321	Ltg	attta	attct	tatt	ctto	ttca	tata	aatg	ttta	atat	acas	atata	aaca	aatt	cttt	accti	taag	aagga	attt	ccat	400
401	L tti	tatai	tttt	aaaa	atata	ittta	tcaa	atat	tttt	caac	cacç	jtaas	tctc	ataa	taat	aagti	tgtt	tcaa	aagta	aataa	480
481	Laat	ttaa	actco	cataa	attt	ttta	ttcg	actg	atct	taaa	gcaa	caco	cagt	gaca	caac	tage	catt	tttt	ctti	gaat	560
561	Laas	aaaa	atcca	aatta	atcat	tgta	ttt	tttt	atac	aatg	raaas	tttc	acca	aaca	atca	tttg	tggta	attt	ctgaa	agcaa	640
641	gte	catgi	ttatç	gcaas	atto	tata	atto	ccat	ttga	cact	acgg	gaagt	aact	gaag	atct	gctti	ttac	atgc	gagae	cacat	720
721	L cti	tcta	aagta	aattt	taat	aata	gtta	ctat	atto	aaga	tttc	atat	atca	aata	ctca	atati	tacti	tcta	aaaa	attaa	800
801	L tta	agata	ataat	taaa	atat	tact	ttt	taat	ttta	agtt	taat	tgtt	gaat	ttgt	gact	attg	attt	attai	tcta	actat	880
881	gti	ttaaa	attgt	tttt	ataga	tagt	ttaa	agta	aata	taag	rtaat	gtag	rtaga	gtgt	taga	gtgti	tacc	ctaa	accat	aaac	960
961	L tai	taaga	attta	atggt	ggac	taat	tttc	atat	attt	ctta	ttgo	tttt	acct	tttc	ttgg	tatg	taagi	teegt	taact	ggaa	1040
1041	. t ta	ctgt	gggt	tgcc	atgg	cact	ctgt	ggtc	ttt	ggtt	cato	rcate	gatg	cttg	cgca	agaa	aaag	acaaa	agaad	caaag	1120
1121	. aas	aaag	gacas	aaca	ıgaga	gaca	aaac	gcaa	tcac	acaa	ccas	ctca	aatt	agtc	actg	gctga	atca	agato	gcc	gegte	1200
1201	. cat	gtat	gtet	aaat	gcca	tgca	aagc	aaca	cgtg	ctta	acat	gcac	ttta	aatg	gctc	accc	atct	caaco	cace	acaca	1280
1281	. aac	cacat	tge	tttt	tctt	catc	atca	ccac	aacc	acct	gtat	atat	tcat	tctc	ttcc	gcca	cctc	aatti	ctto	actt	1360
1361	. caa	acaca	acgto	aacc	tgca	tatg	cgtg	tcat	ccca	tgcc	caas	tctc	catg	catg	ttcc	BBCC	accti	tata	ctta	atata	1440
1441	. ata	accta	ataas	tacc	tcta	atat	cact	cact	tctt	tcat	cato	cato	cato	caga	gtac	tact	actc	tacta	actat	aata	1520
1521	ccc	caac	ccaa	ctcat	tatto	aata	ctac	tcta	ct A	TG G	CG (GAT A	ACA (CT 1	AGA G	GA A	cc c	CAT C	CAC C	FAT	1587
1									;	M	A	D	T	A	R (G !	r i	H 1	HI I	D	11
1588 12															GAC D						1647 31
1648						-												-			1707
															A						51
																				TTG	
24	A	G	G	3			٧	-	9	3	-	T		٧	G	T	v	_	A	L	/ 1

FIGURE 7 (CONT'D)

1768 72	ACT T	GTT V	GCA A	ACA T	P	CTG L	CTC L	GTT V	ATC I	TTC F	AGC S	CCA P	ATC I	CTT L	GTC V	P	GCT A	CTC L	ATC I	ACA T	1827 91
1828 92		GCA A	CTC L	CTC L	ATC I	ACC T	ggt g	TTT F	CTT L	TCC S	TCT S	GGA G	GGG G	TTT F	GGC G	ATT I	GCC A	GCT A	ATA I	ACC T	1887 111
1888 <i>112</i>		TTC F	TCT S	tgg W	ATT I	TAC Y	AA s	gtaag	gcaca	acatt	tato	atct	tact	tcat	aatt	ttgt	gcas	tatg	tgca	tgca	1960 118
1961	. tgt	gttg	gagco	agta	gctt	tgga	tcaa	ttt	tttg	gtcg	aata	acaa	atgt	aaca	ataa	gaaai	tgc	aatt	ctag	ggaa	2040
2041	cat	ttgg	yttaa	ctaa	atac	gaaa	tttg	acct	agct	agct	tgaa	tgtg	tctg	tgta	tatc	atcta	atata	ggta	aaat	gctt	2120
<i>2121</i> 119	ggt	atga	tacc	tatt	gatt	gtga	atag	G T	AC G(CA AC	G GG	GA GA	AG CA	P CC	CA CA	G G	A TO	A GA D	AC AA	∆G	2184 130
2185	TTG	GAC	AGT	GCA	AGG	ATG	AAG	TTG	GGA	AGC	AAA	GCT	CAG	GAT	CTG	AAA	GAC	AGA	GCT	CAG	2244
131	L	D	s	A	R	M	K	L	G	s	K	A	Q	D	L	ĸ	D	R	A	Q	150
2245	TAC	TAC	GGA	CAG	CAA	CAT	ACT	GGT	GGG	GAA	CAT	GAC	CGT	GAC	CGT	ACT	CGT	GGT	GGC	CAG	2304
151	Y	Y	G	Q	Q	H	T	G	G	E	H	D	R	D	R	T	R	G	G	Q	170
2205	CAC	» C·m		COI	CCM	maa	CDD	CAR	CCA	CAA	CITIC	N TO C	~~~	TGC	CAC	ACC	CMM	GAG	ACA	mcc.	2364
2305 171		T	T	ATG M	GCT A	S	GAA E	E	GGA	CAA Q	V	I	A	C	H	T	V	E	T	W	190
1/1	**	•	•	24	^	3	_	2	G	¥	•	-	•			•	•	-	•	**	150
2365	AAC	GAG	CAG	CTT	CAG	AAG	GCT	AAT	GAA	TCC	AAA	ACT	CTT	GTG	GTG	GTT	GAT	TTC	ACG	GCT	2424
191	N	E	Q	L	Q	ĸ	A	N	E	s	ĸ	T	L	v	v	v	D	F	T	A	210
2425		TGG		GGA	CCA P					GCT				GCT	GAT D	TTG	GCT A	AAG K	AAA K		2484
211	5	W	С	G	P	С	R	F	I	A	P	F	F	A	D	L	A			L	230
2485	CCT	AAC	GTG	CTT	TTC	CTC	AAG	GTT	GAT	ACT	GAT	GAA	TTG	AAG	TCG	GTG	GCA	AGT	GAT	TGG	2544
231	P	N	v	L	F	L	ĸ	v	D	T	D	E	L	ĸ	s	v	A	s	D	W	250
2545					ATG			TTC	ATG	TTT 	TTG	_	GAA -		AAG	ATT -	TTG		AAA	_	2604
251	A	I	Q	A	M	P	T	F	М	F	L	K	E	G	K	I	L	D	ĸ	V	270
2605	GTT	GGA	GCC	AAG	AAA	GAT	GAG	СТТ	CAG	TCT	ACC	ATT	GCC	AAA	CAC	TTG	GCT	TAA	gcti	taata	2666
271	v	G	A	ĸ	ĸ	D	E	L	Q	s	T	I	A	ĸ	H	L	A	*		-	288
2667	agt	atga	acta	aaat	gcat	gtag	gtgt	aaga	gctc	atgg	agag	catg	gaat	attg	tatc	egaco	atgt	aace	gtat	aata	2746
2747	act	gago	tcca	tctc	actt	cttc	tatg	aata	aaca	aagg	atgt	tatg	atat	atta	acacı	tctat	ctat	gcac	ctta	ttgt	2826
2827	tct	atga	taaa	tttc	ctct	tatt	atta	taaa	tcat	ctga	atcg	tgac	ggct	tatg	gaat	gette	aaat	agta	caaa	aaca	2906
					actt	tcta	aaca	attc	taac	ttta	gcat	tgtg	aacg	agac	ataa	gtgtt	aaga	agac	ataa	caat	
2007																					2066

FIGURE 7 (CONT'D)

3067	acaattataaagagagaagtttgtatccatttatatattatatactacccatttatatattat	3146
3147	${\tt atgtctttataaggtttgatccatgatatttctaatattttagttgatatgtatatgaaagggtactatttgaactctct}$	3226
3227	tactctgtataaaggttggatcatccttaaagtgggtctatttaattttattgcttcttacagataaaaaaaa	3306
3307	agttggtttgataaaatattgaaggatttaaaataataat	3386
3387	ataatataacatttatctataaaaaagtaaatattgtcataaatctatacaatcgtttagccttgctggacgactctcaa	3466
3467	ttatttaaacgagagtaaacatatttgactttttggttatttaacaaattattatttaacactatatgaaatttttttt	3546
3547	tttatcggcaaggaaataaaattaaattaggagggacaatggtgtgtcccaatccttatacaaccaac	3626
3627	gtcaggtcggggacaacaaaaaaacaggcaagggaaattttttaatttgggttgtcttgtttgctgcataatttatgcag	3706
3707	taaaacactacacataacccttttagcagtagagcaatggttgaccgtgtgcttagcttcttttattttatttttatc	3786
3787	agcaaagaataaataaaataaaatgagacacttcagggatgtttcaacccttatacaaaaccccaaaaacaagtttccta	3866
867 9	gcaccctaccaactaaggtacc	3888

Kpnl

	Pst	ΞI																			
1	ctac	:agga	aatto	catto	gtact	ccca	agtat	catt	ataç	gtga	aagti	tttgg	gctct	ctc	ccgg	ıtggt	tttt	tace	ctcta	attta	80
81	. aag	gggg	tttt	ccaco	ctaaa	aaatt	ctgg	tato	atto	ctcac	ttta	cttg	ttac	ttta	attt	ctca	taat	cttt	ggtt	gaaat	160
161	tat	cac	gctto	ccgca	caco	jatat	ccct	acaa	attt	atta	tttg	rttaa	acat	tttc	aaac	cgca	taaa	attt	tatga	aagtc	240
241	ccg	gtcta	atctt	taat	gtag	jtcta	acat	tttc	atat	tgaa	atat	ataa	ttta	ctta	attt	tagc	gttg	gtag	aaag	cataa	320
321	tga	ittta	attct	tatt	cttc	ttca	tata	aatg	ttta	atat	acaa	itata	aaca	aatt	cttt	acct	taag	aagg	attt	cccat	400
401	ttt	atat	ttta	aaaa	atata	ittta	tcaa	atat	tttt	caac	cacg	rtaaa	tctc	ataa	taat	aagti	tgtt	tcaa	aagt	aataa	480
481	aat	ttaa	actco	cataa	atttt	ttta	ttcg	actg	atct	taaa	igcaa	cacc	cagt	gaca	caac	tagc	catt	tttt	tctt	tgaat	560
561	aáa	aaaa	atcca	aatta	tcat	tgta	tttt	tttt	atac	aatg	jaaaa	itttc	acca	aaca	atca	tttg	tggt	attt	ctga	agcaa	640
641	gto	atgt	tate	gcaaa	atto	tata	atto	ccat	ttga	cact	acgg	raagt	aact	gaag	atct	gctt	ttac	atgc	gaga	cacat	720
721	ctt	ctaa	agta	attt	taat	aata	ıgtta	ctat	atto	aaga	tttc	atat	atca	aata	ctca	atat	tact	tcta	aaaa	attaa	800
801	tta	igata	ataat	taaa	atat	tact	tttt	taat	ttta	agtt	taat	tgtt	gaat	ttgt	gact	attg	attt	atta	ttct	actat	880
881	gtt	taaa	attgt	ttta	ataga	tagt	ttaa	.agta	aata.	taag	taat	gtag	taga	gtgt	taga	gtgt	tacc	ctaa	acca	taaac	960
961	tat	aaga	attta	atggt	ggac	taat	tttc	atat	attt	ctta	ttgc	tttt	acct	tttc	ttgg	tatg	taag	tccg	taac	tggaa	1040
1041	tta	ctgt	gggt	tgcc	atgg	cact	ctgt	ggtc	tttt	ggtt	catg	catg	gatg	cttg	cgca	agaaa	aaag	acaa	agaa	caaag	1120
1121	aaa	aaaç	gacaa	aaca	gaga	ıgaca	aaac	gcaa	tcac	acaa	ccaa	ctca	aatt	agtc.	actg	gctga	atca	agat	cgcc	gegte	1200
1201	cat	gtat	gtct	aaat	.gcca	tgca	aagc	aaca	cgtg	rctta	acat	gcac	ttta	aatg	gctc	accc	atct	caac	ccac	acaca	1280
1281	aac	acat	tgcc	tttt	tctt	catc	atca	ccac	aacc	acct	gtat	atat	tcat	tctc	ttcc	gcca	cctc	aatt	tctt	cactt	1360
1361	caa	caca	cgto	aacc	tgca	ıtatg	cgtg	tcat	ссса	itgco	caaa	tctc	catg	catg	ttcc	aacc	acct	tctc	tctt	atata	1440
1441	ata	ccta	taaa	tacc	tcta	atat	cact	cact	tctt	tcat	cato	catc	catc	caga	gtac	tacta	actc	tact	acta	taata	152
1521	ccc	caac	ccaa	ctcat	atto	aata	ctac	tcta	ct A	ATG (CT T									rgc	1587
1										M	A	S	E .	E (G (Ω,	V	I	A	С	11
1588 12			GTT V		ACA T		AAC N					AAG K			GAA E	TCC S	AAA K		CTT L		1647 31
1648	GTG	GTT	GAT	TTC	ACG	GCT	тст	TGG	TGT	GGA	CCA	TGT	CGT	TTC	ATC	GCT	CCA	TTC	TTT	GCT	170
32	V	v	D	F	Т	A	S	W	С	G	P	С	R	F	1	Α	P	F	F	A	51
1708																				AAG K	176 ⁻

FIGURE 8 (CONT'D)

1768																					1827
72	s	V	Α	S	D	W	A	I	Q	A	М	P	т	F	М	F	L	К	E	G	91
1828									GCC							TCT		ATT	GCC		1887
92	K	I	L	D	K	V	V	G	Α	K	K	D	E	L	Q	S	т	I	A	K	111
1888	CAC	TTG	GCT	ATG	GCG	GAT	ACA	GCT	AGA	GGA	ACC	CAT	CAC	GAT	ATC	ATC	GGC	AGA	GAC	CAG	1947
112	Н	L	A	M	Α	D	Т	Α	R	G	T	Н	Н	D	I	I	G	R	D	Q	131
1948	TAC	CCG	ATG	ATG	GGC	CGA	GAC	CGA	GAC	CAG	TAC	CAG	ATG	TCC	GGA	CGA	GGA	TCT	GAC	TAC	2007
132	Y	P	M	M	G	R	D	R	D	Q	Y	Q	M	S	G	R	G	S	D	Y	151
2008	TCC	AAG	TCT	AGG	CAG	ATT	GCT	AAA	GCT	GCA	ACT	GCT	GTC	ACA	GCT	GGT	GGT	TCC	CTC	CTT	2067
152	S	K	S	R	Q	I	A	K	Α	A	Т	Α	V	Т	Α	G	G	S	L	L	171
2068	GTT	CTC	TCC	AGC	СТТ	ACC	СТТ	GTT	GGA	ACT	GTC	ATA	GCT	TTG	ACT	GTT	GCA	ACA	CCT	CTG	2127
172	v	L	s	s	L	Т	L	v	G	T	v	I	Α	L	Т	V	A	T	P	L	191
2128	CTC	GTT	ATC	TTC	AGC	CCA	ATC	СТТ	GTC	CCG	GCT	CTC	ATC	ACA	GTT	GCA	CTC	CTC	ATC	ACC	2187
192	L	v	I	F	s	P	I	L	v	P	Α	L	I	Т	V	Α	L	L	ı	T	211
2188	GGT	ттт	СТТ	TCC	тст	GGA	GGG	TTT	GGC	ATT	GCC	GCT	ATA	ACC	GTT	TTC	тст	TGG	ATT	TAC	2247
212	G	F	L	s	s	G	G	F	G	I	Α	Α	I	Т	v	F	s	W	I	Y	231
2248	AA d	rtaad	acaca	acati	tato	atct	tact	tcat	aatt	ttat	acaa	tato	rtaca	taca	tata	ttga	асса	αtaq	cttt	ggat	2326
232	-		,								J				-5-5			J J		55	232
2327	' caa	ettt	ttta	atco	raata	acaa	atgt	aaca	ataa	gaaa	ttac	aaat	totad	gagai	acati	t.aat	taac	taaa	taco	raaat	2406
				.55						J				333		55 -					
2407	ttg	gacct	agct	agct	tgaa	tgtg	tctg	tgta	tatc	atct	atat	aggt	aaaa	tgct	tggta	tgat	acct	attg	rattg	rtgaa	2486
2487	tag	G T	AC GO	CA AC	CG GC	GA GA	AG CA	C CC	CA CA	G GG	A TO	A GA	C AA	AG TI	G GA	C AG	T GC	A AG	G AT	'G	2544
233		Y	Α	T	G	E	Н	P	Q	G	S	D	K	L	D	s	A	R	M		250
2545	AAG	TTG	GGA	AGC	AAA	GCT	CAG	GAT	CTG	AAA	GAC	AGA	GCT	CAG	TAC	TAC	GGA	CAG	CAA	CAT	2604
251	K	L	G	s	K	A	Q	D	L	K	D	R	A	Q	Y	Y	G	Q	Q indII	Н	270
2605																					2565
271	ACT	GGT	GGG	GAA	CAT	GAC	CGT	GAÇ	CGT	ACT	CGT	GGT	GGÇ	CAG	CAC	ACT	ACT	T <u>AA</u>	gctt	aata	2000
2/1		GGT G	GGG G	GAA E	CAT H	GAC D	CGT R	GAC D	CGT R	ACT T	CGT R	GGT G	GGC G	CAG Q	CAC H	ACT T	ACT T	*	gett	<u>a</u> ata	288
	Т	G	G	E	Н	D	R	D	R	т	R	G	G	Q	Н	т	т	*			288
2667	T agt	G atga	G lacta	E	н gcat	D gtag	R gtgt	D aaga	R gctc	T atgg	R agag	G catg	G gaata	Q attg	H	T gaco	T atgt	*	ıgtat	aata	288 2746
2667	T agt	G atga	G lacta	E	н gcat	D gtag	R gtgt	D aaga	R gctc	T atgg	R agag	G catg	G gaata	Q attg	H	T gaco	T atgt	*	ıgtat		288 2746
2667 2747	T agt act	G atga	G acta tcca	E laaat ltctc	H gcat actt	D gtag cttc	R gtgt tatg	D aaga aata	R gctca aacaa	T atgga aagga	R agage	G catgo	G gaata atata	Q attgr	H catco	T gaco	T atgt	* :aaca	gtat	aata	288 2746 2826
2667 2747 2827	agt act	G :atga :gago :atga	G acta tcca	E aaat tete	H gcat actt	D gtag cttc tatt	R gtgt tatg atta	D aaga aata taaa	R geter aaca teat	T atgga aagga ctga	R agago atgt	G catgg tatgg tgacg	G gaata atata ggcti	Q attg: attaa tatg:	H catco acact	T cgacc cctat	T :atgt :ctat	* :aaca :gcac	gtat	aata Ittgt Iaaca	288 2746 2826 2906
2667 2747 2827	agt act	G :atga :gago :atga	G acta tcca	E aaat tete	H gcat actt	D gtag cttc tatt	R gtgt tatg atta	D aaga aata taaa	R geter aaca teat	T atgga aagga ctga	R agago atgt	G catgg tatgg tgacg	G gaata atata ggcti	Q attg: attaa tatg:	H catco acact	T cgacc cctat	T :atgt :ctat	* :aaca :gcac	gtat	aata	288 2746 2826 2906

FIGURE 8 (CONT'D)

3067	acaattataaaagagagaagtttgtatccatttatatattatatactacccatttatatattat	3146
3147	atgtctttataaggtttgatccatgatatttctaatattttagttgatatgtatatgaaagggtactatttgaactctct	3226
3227	tactctgtataaaggttggatcatccttaaagtgggtctatttaattttattgcttcttacagataaaaaaaa	3306
3307	agttggtttgataaaatattgaaggatttaaaataataat	3386
3387	ataatataacatttatctataaaaaagtaaatattgtcataaatctatacaatcgtttagccttgctggacgactctcaa	3466
3467	ttatttaaacgagagtaaacatatttgactttttggttatttaacaaattattatttaacactatatgaaatttttttt	3546
3547	tttatcggcaaggaaataaaattaaattaggagggacaatggtgtgtcccaatccttatacaaccaac	3626
3627	gtcaggtcggggacaacaaaaaaaacaggcaagggaaattttttaatttgggttgtcttgtttgctgcataatttatgcag	3706
3707	taaaacactacacataacccttttagcagtagagcaatggttgaccgtgtgcttagcttcttttatttttttt	3786
3787	agcaaagaataaataaaataaaatgagacacttcagggatgtttcaacccttatacaaaaccccaaaaacaagtttccta	3866
867	gcaccctaccaactaaggtacc	3888
	KpnI	

PstI

1	cta	cagg.	aatt	catte	gtact	tccca	agtat	catt	atag	gtgaa	aagt	tttgg	getet	ctcg	gccgg	tggt	tttt	tacc	tcta	ttta	80
8	1 aa	gggg	tttt	ccac	ctaaa	aaatt	ctgg	rtato	atto	tcac	ttta	icttg	ttac	ttta	attt	ctca	taato	cttt	ggttg	gaaat	160
16	l ta	tcac	gctt	ccgca	acaco	gatat	ccct	acaa	attt	atta	tttg	ttaa	acat	tttc	aaac	cgcat	taaaa	attt	catga	aagtc	240
243	l cc	gtet	atct	ttaat	gtag	gtcta	acat	tttc	atat	tgaa	atat	ataa	ttta	ctta	attt	tagc	gttg	gtaga	aaago	cataa	320
321	l tga	attt	attc	ttatt	cttc	ettea	tata	aatg	ttta	atat	acaa	tata	aaca	aatt	cttt	accti	taaga	aagga	attto	ccat	400
401	l tti	tata	tttt	aaaa	atata	attta	itcaa	atat	tttt	caac	cacg	taaa	tctc	ataa	taat	aagti	tgtti	tcaaa	agta	aataa	480
481	l aa	ttta	actc	cataa	atttt	ttta	ttcg	actg	atct	taaa	gcaa	cacc	cagt	gaca	caac	tagco	catt	tttti	cttt	gaat	560
561	l aaa	aaaa	atcca	aatta	atcat	tgta	ittt	tttt	atac	aatg	aaaa	tttc	acca	aaca	atca	tttgi	tggta	attto	ctgaa	agcaa	640
641	l gto	catg	ttat	gcaaa	aatto	ctata	atto	ccat	ttga	cact	acgg	aagt	aact	gaag	atct	gctti	ttaca	atgc	gagad	cacat	720
721	l cti	tcta	aagta	aattt	taat	aata	gtta	ctat	atto	aaga	tttc	atat	atca	aata	ctca	atati	tacti	tcta	aaaa	attaa	800
801	l tta	agata	ataa	taaa	aatat	tact	tttt	taat	ttta	agtt	taat	tgtt	gaat	ttgt	gact	attga	attta	attai	tcta	actat	880
881	l gti	ttaaa	attgi	tttta	ataga	atagt	ttaa	agta	aata	taag	taat	gtag	taga	gtgt	taga	gtgti	tacco	ctaaa	accat	aaac	960
961	l ta	taaga	attta	atggt	ggac	taat	tttc	atat	attt	ctta	ttgc	tttt	acct	tttc	ttgg	tatgi	taagi	tccg	aact	ggaa	1040
1041	. tta	actgt	gggt	tgcc	atgg	rcact	ctgt	ggtc	tttt	ggtt	catg	catg	gatg	cttg	cgcaa	agaaa	aaaga	acaaa	agaad	caaag	1120
1121	. aaa	aaaag	jacaa	aaca	ıgaga	igaca	.aaac	gcaa	tcac	acaa	ccaa	ctca	aatt	agtc	actg	gctga	atcaa	agato	gccg	gcgtc	1200
1201	. cat	gtat	gtct	aaat	gcca	tgca	aagc	aaca	cgtg	ctta	acat	gcac	ttta	aatg	getea	accca	atcto	caaco	caca	acaca	1280
1281	aac	cacat	tgcc	tttt	tctt	cato	atca	ccac	aacc	acct	gtat	atat	tcat	tctc	ttcc	gccad	cctca	aatt	ctto	cactt	1360
1361	. caa	acaca	ecgto	caaco	tgca	tatg	cgtg	tcat	ccca	tgcc	caaa	tctc	catg	catg	ttcca	aacca	acct	tctct	ctta	atata	1440
1441	. ata	accta	taaa	ataco	tcta	atat	cact	cact	tctt	tcat	catc	catc	catc	caga	gtacı	tacta	actct	tacta	actat	aata	1520
1521 1	ccc	caac	ccaa	ctcat	atto	aata	ctac	tcta						BAA A				ACA A	GG C	CTC L	1587 11
1588 12				GGA G										ATT I						GAA E	1647 31
1648					CTC L															CTA L	1707 51
																			-	GAG	
																				E	

FIGURE 9 (CONT'D)

1768 72		ACT T	GAC D	AAA K	TTC F	CGT R	AAA K	CAA Q	TCG S	GAG E	CGA R	TTC F	GGT G	ACT T	ACG T	ATA I	TTT F	ACA T	GAG E	ACG T	1827 91
1828	GTG	ACG	AAA	GTC	GAT	TTC	тст	TCG	AAA	CCG	ттт	AAG	CTA	TTC	ACA	GAT	TCA	AAA	GCC	ATT	1887
92	V	Т	K	V	D	F	S	S	K	P	F	K	L	F	Т	D	S	K	Α	I	111
1888	CTC	GCT	GAC	GCT	GTG	ATT	СТС	GCT	ACT	GGA	GCT	GTG	GCT	AAG	CGG	CTT	AGC	TTC	GTT	GGA	1947
112	L	Α	D	A	V	I	L	A	т	G	Α	V	Α	K	R	L	S	F	V	G	131
1948	тст	GGT	GAA	GGT	тст	GGA	GGT	TTC	TGG	AAC	CGT	GGA	ATC	TCC	GCT	TGT	GCT	GTT	TGC	GAC	2007
132	S	G	E	G	s	G	G	F	W	N	R	G	I	s	Α	С	A	V	С	D	151
2008	GGA	GCT	GCT	CCG	АТА	TTC	CGT	AAC	AAA	ССТ	CTT	GCG	GTG	ATC	GGT	GGA	GGC	GAT		GCA	2067
152	G	Α	Α	P	Ι	F	R	N	K	P	L	Α	V	I	G	G	G	D	S	A	171
2068	ATG	GAA	GAA	GCA	AAC	TTT	CTT	ACA	AAA	тат	GGA	TCT	AAA	GTG	тат	АТА	ATC	CAT	AGG	AGA	2127
172	M	E	E	Α	N	F	L	Т	K	Y	G	S	K	V	Y	I	I	Н	R	R	191
2128	GAT	GCT	TTT		GCG					CAG										GAT	2187
192	D	A	F	R	A	S	K	I	M	Q	Q	R	A	L	S	N	P	K	Ι	D	211
2188				AAC																GGA	2247
212	V	Ι	W	N	s	S	V	V	E	A	Y	G	D	G	E	R	D	V	L	G	231
2248																					2307
232	G	L	K	V	K	N	V	V	т	G	D	V	s	D	L	K	V	S	G	L	251
2308				ATT														GAG			2367
252	F	F	A	I	G	Н	Е	P	Α	т	K	F	L	D	G	G	V	E	L	D	271
2368																		GGA		TTC	2427
272	S	D	G	Y	V	V	Т	K	P	G	Т	Т	Q	T	s	V	P	G	V	F	291
2428																		GGA			2487
292	A	Α	G	D	V	Q	D	K	K	Y	R	Q	A	Ι	Т	A	A	G	т	G	311
2488																					2547
312	C	М	A	A	L	D	A	E	Н	Y	L	Q	E	I	G	S	Q	Q	G	K	331
2548	AGT	GAT	TG <u>A</u>	agct	<u>t</u> aat	aagt	atga	acta	ıaaat	gcat	gtag	gtgt	aaga	gcto	atgg	agag	catg	gaat	attg	tatc	2624
332	S	D	* F	lindI	II															3	334
2625	cga	ccat	gtaa	cagt	ataa	taac	tgag	ctcc	atct	cact	tctt	ctat	gaat	aaaca	aaagg	gatgt	tato	gatat	atta	acac	2704
2705	tct	atct	atgo	acct	tatt	gttc	tatg	ataa	attt	cctc	ttat	tatt	ataa	atca	tctga	aatco	gtgac	ggct	tato	gaat	2784
2785	gct	tcaa	atag	jtaca	aaaa	caaa	tgtg	tact	ataa	gact	ttct	aaac	aatt	ctaa	ettta	agcat	tgtg	gaacg	Jagac	ataa	2864
2865	gto	ttaa	gaag	jacat	aaca	atta	taat	ggaa	gaag	tttg	tctc	catt	tata	tatta	atata	attac	ccac	ttat	gtat	tata	2944

FIGURE 9 (CONT'D)

945	ttaggatgttaaggagacataacaattataaagagagaagtttgtatccatttatatattatataccccatttatata	3024
025	ttatacttatccacttatttaatgtctttataaggtttgatccatgatatttctaatattttagttgatatgtatatgaa	3104
105	${\tt agggtactatttgaactctcttactctgtataaaggttggatcatccttaaagtgggtctatttaattttattgcttctt}$	3184
185	acagataaaaaaaaaattatgagttggtttgataaaatattgaaggatttaaaataat	3264
265	atatatgtatataaatttattataatataacatttatctataaaaaa	3344
345	gccttgctggacgactctcaattatttaaacgagagtaaacatatttgactttttggttatttaacaaattattatttaa	3424
425	cactatatgaaatttttttttttttatcggcaaggaaataaaattaaattaggagggacaatggtgtgtcccaatccttat	3504
505	${\tt acaaccaacttccacaggaaggtcaggtcggggacaacaaaaaaaa$	3584
585	$\verb tttgctgcata at \verb ttatgcagta a a a cacta cacata accett ttagcagtagagca at \verb ggttgaccgtgtgcttagctt accett ttagcagtagagca at \verb ggttgaccgtgtgcttagcttagctt accett ttagcagtagagca at \verb ggttgaccgtgtgcttagcttagcttagctt accett ttagcagtagagca at \verb ggttgaccgtgtgcttagcttagctt accett ttagcagtagagca at \verb ggttgaccgtgtgcttagcttagcttagcttagcttagc$	3664
665	cttttattttatttttatcagcaaagaataaataaaata	3744
745	accccaaaaacaagtttcctagcaccctaccaactaa <u>ggtacc</u>	3787
	Kon T	

		stI																			
1	ctac	<u>ag</u> ga	atto	catto	gtact	ccca	igtat	catt	ata	gtga	aagt	tttg	gctct	ctc	gccgg	gtggt	tttt	tacc	tcta	ttta	80
81	aaç	gggg	tttt	ccaco	ctaaa	aatt	ctgg	tatc	atto	ctca	cttta	actto	gttac	ttta	attt	ctca	taat	cttt	ggtto	gaaat	160
161	tat	caco	gette	cgca	acacg	ratat	ccct	acaa	attt	atta	atttg	gttaa	acat	tttc	aaac	cgca	taaa	attt	tatga	aagtc	240
241	ccg	gtcta	atct	taat	gtag	ıtcta	acat	tttc	atat	tgaa	aatat	tataa	attta	ctta	attt	tagc	gttg	gtaga	aaago	cataa	320
321	. tga	attta	attct	tatt	cttc	ttca	tata	aatg	ttta	aatat	acaa	atata	aaca	aatt	cttt	acct	taag	aagga	attto	ccat	400
401	ttt	atat	ttta	aaaa	atata	ıttta	tcaa	atat	tttt	caa	cac	gtaaa	tctc	ataa	taat	aagt	tgtt:	tcaa	aagta	aataa	480
481	aat	ttaa	actco	cataa	tttt	ttta	ittcg	actg	atct	taaa	agcaa	acaco	cagt	gaca	caac	tagc	catt	tttt	tctt	tgaat	560
561	. aaa	aaaa	atcca	atta	tcat	tgta	tttt	tttt	atac	caato	jaaaa	attto	acca	aaca	atca	tttg	tggt	attt	ctgaa	agcaa	640
641	gto	atgt	tate	gcaaa	atto	tata	attc	ccat	ttga	acact	acgg	gaagt	aact	gaag	atct	gctt	ttac	atgc	gagad	cacat	720
721	ctt	ctaa	agta	attt	taat	aata	ıgtta	ctat	atto	caaga	attto	catat	atca	aata	ctca	atat	tact	tctaa	aaaa	attaa	800
801	. tta	agata	ataat	taaa	aatat	tact	ttt	taat	ttta	agti	taat	tgtt	gaat	ttgt	gact	attg	attt	attai	ttcta	actat	880
881	gtt	taaa	attgt	ttta	ataga	tagt	ttaa	agta	aata	ataag	gtaat	gtag	gtaga	gtgt	taga	gtgt	tacc	ctaaa	accat	taaac	960
961	. tat	aaga	attta	atggt	ggac	taat	tttc	atat	attt	ctta	attgo	cttt	acct	tttc	ttgg	tatg	taag	tccg	taact	tggaa	1040
1041	tta	ctgt	gggt	tgcc	atgg	cact	ctgt	ggtc	tttt	ggtt	cate	gcato	gatg	cttg	cgca	agaa	aaag	acaa	agaad	caaag	1120
1121	aaa	aaag	jacaa	aaca	ıgaga	gaca	.aaac	gcaa	tcac	cacaa	accaa	actca	aatt	agtc	actg	gctg	atca	agato	cgcc	gcgtc	1200
1201	cat	gtat	gtct	aaat	gcca	tgca	.aagc	aaca	cgtç	gctta	acat	gcac	ttta	aatg	gctc	accc	atct	caac	ccaca	acaca	1280
1281	aac	acat	tgcc	tttt	tctt	cato	atca	ccac	aacc	acct	gtat	atat	tcat	tctc	ttcc	gcca	cctc	aatt	tatta	cactt	1360
1361	caa	caca	cgto	aacc	tgca	tatg	cgtg	tcat	ccca	atgco	caaa	atcto	catg	catg	ttcc	aacc	acct	tctc	tctta	atata	1440
1441	ata	iccta	ıtaaa	tacc	tcta	atat	cact	cact	tctt	tcat	cato	cato	catc	caga	gtac	tact	actc	tacta	actat	taata	1520
1521	ccc	caac	ccaa	ctcat	atto	aata	ctac	tcta	ct A	ATG (GCG (GAT A	ACA C	CT A	AGA (GA A	ACC (CAT (CAC (GAT	1587
1										М	Α	D	T	A	R	G '	т :	H 1	H 1	D	11
1588 12					GAC D								GAC D		GAC D				ATG M	TCC S	1647 31
																		-			
1648 32			GGA G		GAC D			AAG K	TCT S		CAG Q			AAA K	GCT A	GCA A	ACT T	GCT A	GTC V	ACA T	1707 51
1708	GCT	GGT	GGT	TCC	CTC	CTT	GTT	CTC	TCC	AGC	CTT	ACC	CTT	GTT	GGA	ACT	GTC	АТА	GCT	TTG	1767

FIGURE 10 (CONT'D)

52	A	G	G	s	L	L	v	L	S	s	L	т	L	V	G	Т	v	I	A	L	71
1768	ACT	GTT	GCA	ACA	ССТ	СТG	CTC	GTT	ATC	TTC	AGC	CCA	ATC	CTT	GTC	CCG	GCT	стс	ATC	ACA	1827
72	T	V	Α	Т	P	L .	L	V	I	F	s	P	I	L	V	P	Α	L	I	Т	91
1828																					1887
92	V	A	L	L	Ι	т	G	F	L	S	S	G	G	F	G	I	Α	A	I	Т	111
1888 112		TTC F	TCT S	TGG W	ATT I	TAC Y	AA g K	gtaag	gcaca	acati	tato	catc	ttacı	tca	taati	ttgt	tgcaa	atato	gtgca	atgca	1960 118
1061				-									- 44								2040
1961	tgt	gttga	agcca	agtag	дессі	gga	caat		ttgg	gtcga	аасаа	acaaa	atgta	aacaa	асаад	jaaat	tgca	aaati	ccag	gggaa	2040
2041	cati	ttgg	taad	ctaaa	ataco	gaaat	ttga	accta	agcta	gct	gaat	gtgi	ctg	gtai	tatca	tctá	atata	aggta	aaaa	tgctt	2120
2121	ggta	atgai	tacci	tatto	gattg	gtgaa	atag													AG	2184
119								Y	A	Т	G	E	Н	P	Q	G	S	D	K		130
2185 131		GAC D	AGT S	GCA A	AGG R	ATG M	AAG K	TTG L	GGA G	AGC S	AAA K	GCT A	CAG Q	GAT D	CTG L	AAA K	GAC D	AGA R	GCT A	CAG Q	2244 150
													_								
2245 151		TAC Y	GGA G	Q Q	Q Q	CAT H	ACT T	GGT	GGG	GAA E	H	GAC D	CGT R	D D	CGT R	ACT T	R	GGT	GGC G	Q Q	2304 170
2305	CAC	АСТ	ACC	ATG	ААТ	GGT	СТС	GAA	ACT	CAC	AAC	ACA	AGG	СТС	ጥርጥ	АТС	GTA	GGA	AGT	GGC	2364
171		т	т	М	N	G	L	E	т	Н	N	т	R	L	C	I	v	G	s	G	190
2365	CCA	GCG	GCA	CAC	ACG	GCG	GCG	АТТ	TAC	GCA	GCT	AGG	GCT	GAA	СТТ	AAA	ССТ	СТТ	CTC	TTC	2424
191	P	A	Α	Н	Т	Α	A	I	Y	A	Α	R	A	E	L	K	P	L	L	F	210
2425				ATG					GCT											GTC	2484
211	E	G	W	M	Α	N	D	I	Α	P	G	G	Q	L	т	т	Т	т	D	V	230
2485 231		AAT N	TTC F	CCC P	GGA G	TTT F	CCA P	GAA E	GGT G	ATT I	CTC L	GGA G	GTA V	GAG E	CTC L	ACT T	GAC D	AAA K	TTC F	CGT R	2544 250
231	E.	14	r	P	G	F	r	Ē	G	1	ь	G	V	ь	ם	1	D	K	F		250
2545 251		CAA Q	TCG S	GAG E	CGA R	TTC F	GGT G	ACT T	ACG T	ATA I	TTT F	ACA T	GAG E	ACG T	GTG V	ACG T	AAA K	GTC V	GAT D	TTC F	2604 270
2605	መረጥ	TICC.	222	ccc	ጥጥጥ	3 A C	CTA	mmc	202	Cam	TIC N	777	CCC	አ መጥ	CTC	CCT	CAC	CCT	CTC	አመጥ	2664
271		s	K	P	F	K	L	F	т	D	S	K	A	I	L	A	D	A	V	I	290
2665	CTC	GCT	ACT	GGA	GCT	GTG	GCT	AAG	CGG	СТТ	AGC	TTC	GTT	GGA	тст	GGT	GAA	GGT	тст	GGA	2724
291		Α	т	G	A	v	Α	К	R	L	s	F	v	G	s	G	E	G	s	G	310
2725	GGT	TTC	TGG	AAC	CGT	GGA	ATC	TCC	GCT	TGT	GCT	GTT	TGC	GAC	GGA	GCT	GCT	CCG	ATA	TTC	2784
311	G	F	W	N	R	G	I	S	Α	С	A	V	C	D	G	Α	A	P	I	F	330
2785																					2844
331	ĸ	IN	K	P	L	A	V	1	نی	G	G	D	S	A	M	Ľ	E	A	N	r	350

FIGURE 10 (CONT'D)

351		ACA T	AAA K	TAT Y	GGA G	TCT S	AAA K	GTG V	TAT Y	ATA I	ATC I	CAT H	AGG R	AGA R	GAT D	GCT A	TTT F	AGA R	GCG A	TCT S	2904 370
2905	AAG	ATT	ATG	CAG	CAG	CGA	GCT	TTG	TCT	AAT	CCT	AAG	АТТ	GAT	GTG	ATT	TGG	AAC	TCG	тст	2964
371	K	I	M	Q	Q	R	A	L	S	N	P	K	I	D	V	I	W	N	s	S	390
2965																					3024
391	V	V	Е	Α	Y	G	D	G	E	R	D	V	L	G	G	L	K	V	K	N	410
3025 411		GTT V	ACC T	GGA G	GAT D	GTT V	TCT S	GAT D	TTA L	AAA K	GTT V	TCT S	GGA G	TTG L	TTC F	TTT F	GCT A	ATT I	GGT G	CAT H	3084 430
3085	GAG	CCA	GCT	ACC	AAG	ጥጥጥ	ምሞ G	САТ	GGT	GGT	CTT	GAG	ጥጥ ል	GAT	ጥሮር	GAT	GGT	ТАТ	GTT	GTC	3144
431		P	A	Т	K	F	L	D	G	G	V	E	L	D	s	D	G	Y	v	v	450
3145	ACG	AAG	ССТ	GGT	ACT	ACA	CAG	ACT	AGC	GTT	ccc	GGA	GTT	TTC	GCT	GCG	GGT	GAT	GTT	CAG	3204
451	Т	K	P	G	Т	Т	Q	Т	S	V	P	G	V	F	Α	Α	G	D	V	Q	470
3205 471		AAG K	AAG K	TAT Y	AGG R	CAA O	GCC A	ATC I	ACT T	GCT A	GCA A	GGA G	ACT T	GGG G	TGC C	ATG M	GCA A	GCT A	TTG L	GAT D	3264 490
3265 491		GAG E	CAT H	TAC Y	TTA L	CAA	GAG E	ATT I	GGA G	TCT S	CAG Q	CAA O	GGT G	AAG K	AGT S	GAT D		agct Hind		aagt	3327 507
2220											_	~~~		~			***		. + +		2407
3320	acc	jaact	aaaa	itgea	Lyta	ggtg	Laay	ayet	catg	yaya	ycar	yyaa	Lally	JLAL	cya	cace	caac	agua	ıcaaı	aact	3407
3408	gag	getec	atct	cact	tctt	ctat	gaat	aaac	aaag	gatg	ttat	gata	tatta	aacad	ctcta	atcta	atgca	acctt	atto	ıttct	3487
							_					_								gttct	
3488	atç	gataa	attt	cctc	ttat	tatt	ataa	atca	tctg	aatc	gtga	cggc	ttat	ggaai	tgctt	caaa	atagt	acaa	aaaa		3567
3488 3568	atg gtg	gataa gtact	attt	cctc	ttat	tatt aaac	ataa aatt	atca ctaa	tetg	aatc agca	gtga: ttgt:	cggc: gaac;	ttat:	ggaat cataa	tgct1	caaa	atagt gaaga	acaa	aaacaa	aaat	3567 3647
3488 3568 3648	atg gtg aat	gataa gtact	attt ataa agaag	cctc gact	ttat	tatt aaac catt	ataa aatt tata	atca ctaa tatt	tctg.	aatc agca atta	gtga ttgt: ccca	cggc gaacq	ttatç gagaç tgta	ggaai cataa ttata	tgett agtgt	ccaaa ctaag	atagt gaaga gttaa	cacaa acata aggaq	aaaac aacaa yacat	aaat	3567 3647 3727
3488 3568 3648 3728	atg gtg aat	gataa gtact cggaa cataa	aatta aataa agaag aagag	cctc gact rtttg ragaa	ttat	tatt aaac catt gtat	ataa aatt tata ccat	atca ctaa tatt	tctg; cttt; atat; atat	aatc agca atta tata	gtga ttgt: ccca tact	cggc gaac ctta ccca	ttatç gagac tgta attta	ggaai cataa ttata	tgett agtgt attag	ccaaa ctaag ggatg	atagt gaaga gttaa	cacaa acata aggaq cactt	aaaac aacaa yacat	aaat ittat	3567 3647 3727 3807
3488 3568 3648 3728 3808	atg gtg aat att	gataa gtact cggaa cataa	aatta agaag aagag	cctc gact gtttg gagaa	ttat	tatt aaac catt gtat atga	ataa aatt tata ccat	atca ctaa tatt ttat	tctg. cttt. atat. atat	aatc agca atta tata	gtga ttgt ccca tact	cggc: gaac; ctta: accca	ttatq gagad tgtan attta	ggaai cataa ttata atata atgaa	tgctt agtgt attag attat	ccaaa ctaag ggatg cactt	atagt gaaga gttaa catco	acata aggaç cactt	aaaac aacaa gacat tattt	caaat attat caaca caatg	3567 3647 3727 3807 3887
3488 3568 3648 3728 3808	ato gto aat att tot	gataa gtact ggaa ataa attat	aatti ataa agaag aagag aagg	ecto agact atttg agaa atttg	ttat tctc gttt atcc	tatt aaac catt gtat atga atcc	ataa aatt tata ccat tatt	atca ctaa tatt ttat tcta agtg	tetga ettta atata atat atat	aatc agca atta tata ttta	gtga ttgt ccca tact gttg	cggc	gagad tgtad attta gtata	ggaal cataa ttata atata atgaa ttcti	tgctt agtgt attag attat aaggg	ccaaa ctaag ggatg cactt gtact	atagt gaaga gttaa catco	cacaa aggag cactt	aaaac aacaa yacat cattt	caaat attat caaca caatg cttac	3567 3647 3727 3807 3887 3967
3488 3568 3648 3728 3808	ato gto aat att tot	gataa gtact ggaa ataa attat	aatti ataa agaag aagag aagg	ecto agact atttg agaa atttg	ttat tctc gttt atcc	tatt aaac catt gtat atga atcc	ataa aatt tata ccat tatt	atca ctaa tatt ttat tcta agtg	tetga ettta atata atat atat	aatc agca atta tata ttta	gtga ttgt ccca tact gttg	cggc	gagad tgtad attta gtata	ggaal cataa ttata atata atgaa ttcti	tgctt agtgt attag attat aaggg	ccaaa ctaag ggatg cactt gtact	atagt gaaga gttaa catco	cacaa aggag cactt	aaaac aacaa yacat cattt	caaat attat caaca caatg	3567 3647 3727 3807 3887 3967
3488 3568 3648 3728 3808 3888 3968	atg gtg aat att tct tct	gataa gtact ggaa cataa cttat gtat	aattt ataa agaag aagag aaagg aaaag	cctc gact gtttg gagaa gtttg ggttg	ttat tctc gttt atcc	tatt aaac catt gtat atga atcc	ataa aatt tata ccat tatt tttaa	atca ctaa tatt ttat tcta agtg	tetga ettta atat atat atat ggte	aatca agca atta tata tata tatt	gtgad ttgtd cccad tactd gttgd taatd	cggc: gaac; ctta: accc; atat; ttta:	gagad tgtat attta gtata ttgct	ggaat cataa ttata atata atgaa ttctt	tgctt agtgt attag attat aaggg	ccaaa ctaag ggatg cactt gtact gataa	atage gaaga gttaa catco catco catco	cacaa aggag cactt cgaac	aaaac aacaa gacat cattt ctctc	caaat attat caaca caatg cttac	3567 3647 3727 3807 3887 3967 4047
3488 3568 3648 3728 3808 3888 3968 4048	atg gtg aat att tct tgg ata	yataa yytact ggaa ataa atttat gtat	aattt aaagag aagag aaagg aaagg	gact gact rtttg agaa rtttg ggttg	ttat ttct tctc gttt atcc gatc ttga ataa	tatt aaaac catt gtat atga atcc agga aaaaa	ataa aatt tata ccat tatt ttaaa tttaa	atca ctaa tatt ttat tcta agtg aaat	cttt. atat atat atat ggtc aata	aatca agca atta tata ttta tatt ataa	gtga ttgte cccae tacte gttg taat taat	cggccggaaccctta acccca atati ttta taaaa	ttatg gagad attta attta gtata ttgc taaca	ggaat cataa ttata atata ttcti atata	tgeti agtgi attai attai tacag tacag	ccaaa ttaag ggatg cactt ytact yataa gataa catgt	yaaga yttaa catco cattt catal	cacaa acata aaggag cactt cgaac aaaaa caaat	aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	caaat attat caaca caatg cttac cgagt	3567 3647 3727 3807 3887 3967 4047 4127

FIGURE 10 (CONT'D)

4288	aggtcggggacaacaaaaaaacaggcaagggaaattttttaatttgggttgtcttgtttgctgcataatttatgcagtaa	4367
4368	aacactacacataacccttttagcagtagagcaatggttgaccgtgtgcttagcttcttttattttatttttatcagc	4447
4448	aaagaataaataaaataaaatgagacacttcagggatgtttcaacccttatacaaaaccccaaaaaacaagtttcctagca	4527
4528	ccctaccaactaaggtacc	4546
	VnnT	

PstI

1	ctgo	:agga	atto	catto	tact	ccca	gtat	catt	atag	gtga	aagt	tttg	gctct	ctcg	ccgg	tggt	tttt	tacc	tcta	ttta	80
81	aag	ggggt	tttc	ccaco	taaa	aatt	ctgg	tatc	atto	tcac	ttta	acttg	ıttac	ttta	attto	ctcat	taato	ctttg	ggttg	gaaat	160
161	tat	caco	gette	cgca	cacg	ratat	ccct	acaa	attt	atta	tttg	ttaa	acat	tttc	aaaco	cgcat	taaaa	attt	atga	agtc	240
241	ccg	gteta	atctt	taat	gtag	rtcta	acat	tttc	atat	tgaa	atat	ataa	ıttta	ctta	attt	cagco	gttg	gtaga	aaago	ataa	320
321	tga	ittta	attct	tatt	cttc	ttca	tata	aatg	ttta	atat	acaa	tata	aaca	aatt	cttta	acct	taaga	aagga	attto	ccat	400
401	ttt	atat	ttta	aaaa	tata	ttta	tcaa	atat	tttt	caac	cacc	rtaaa	tctc	ataa	taata	aagtt	tgtt	tcaaa	aagta	aataa	480
481	aat	ttaa	actco	cataa	tttt	ttta	ttcg	actg	atct	taaa	gcaa	caco	cagt	gaca	caact	cagco	catt	tttt	cttt	gaat	560
561	aaa	aaaa	tcca	aatta	tcat	tgta	tttt	tttt	atac	aatg	aaaa	tttc	acca	aaca	atcat	ttgt	tggta	attt	ctgaa	agcaa	640
641	gto	atgt	tato	gcaaa	atto	tata	attc	ccat	ttga	cact	acgg	gaagt	aact	gaag	atcto	getti	ttaca	atgcg	gagad	cacat	720
721	ctt	ctaa	agta	attt	taat	aata	gtta	ctat	atto	aaga	tttc	atat	atca	aata	ctcaa	atatt	tact	tctaa	aaaa	attaa	800
801	tta	agata	ataat	taaa	atat	tact	tttt	taat	ttta	agtt	taat	tgtt	gaat	ttgt	gacta	attga	attta	attai	tcta	actat	880
881	gtt	taaa	attgt	ttta	taga	tagt	ttaa	agta	aata	taag	rtaat	gtag	ıtaga	gtgt	tagag	gtgt1	tacc	ctaaa	accat	aaac	960
961	tat	aaga	attta	atggt	ggac	taat	tttc	atat	attt	ctta	ttgo	tttt	acct	tttc	ttggt	tatg	taag	teegt	caact	ggaa	1040
1041	tta	ctgt	gggt	tgcc	atgg	cact	ctgt	ggtc	tttt	ggtt	catg	catg	gatg	cttg	cgcaa	agaaa	aaaga	acaaa	agaac	aaag	1120
1121	aaa	aaag	racaa	aaca	.gaga	gaca	aaac	gcaa	tcac	acaa	ccaa	ctca	aatt	agtc	actg	getga	atca	agato	cgccg	gcgtc	1200
1201	cat	gtat	gtct	aaat	gcca	tgca	aagc	aaca	cgtg	ctta	acat	gcac	ttta	aatg	gctca	accca	atct	caaco	ccaca	acaca	1280
1281	aac	acat	tgcc	tttt	tctt	catc	atca	ccac	aacc	acct	gtat	atat	tcat	tctc	ttccg	gccad	cctca	aatt	ctto	cactt	1360
1361	caa	caca	cgto	aacc	tgca	tatg	cgtg	tcat	ccca	tgcc	caaa	tctc	catg	catg	ttcca	aacca	acct	tetet	ctta	atata	1440
1441	ata	ccta	taaa	tacc	tcta	atat.	cact	cact	tctt	tcat	cato	cato	catc	caga	gtact	tacta	actc	tacta	actat	aata	1520
1521 1	ccc	caaco	ccaa	ctcat	atto	aata	ctac	tcta			AT (N		CTC C	SAA A E '			N '		AGG C	CTC L	1587 11
1588 12		ATC I	GTA V	GGA G	AGT S	GGC G	CCA P	GCG A	GCA A	CAC H	ACG T	GCG A	GCG A	ATT I	TAC Y	GCA A	GCT A	AGG R	GCT A	GAA E	1647 31
1648																					1707
32		K	P	L	L	F	E	G	W	М	A	N	D	I	A	P	G	G	Q	L	51
1708 52		ACC T	ACC T	ACC T	GAC D	GTC V	GAG E	AAT N	TTC F	CCC P	GGA G	TTT F	CCA P	GAA E	GGT G	ATT I	CTC L	GGA G	GTA V	GAG E	1767 71

FIGURE 11 (CONT'D)

1768 CTC ACT GAC AAA TTC CGT AAA CAA TCG GAG CGA TTC GGT ACT ACG ATA TTT ACA GAG ACG 91 D K F R K Q S E R F G T т Ι 1828 GTG ACG AAA GTC GAT TTC TCT TCG AAA CCG TTT AAG CTA TTC ACA GAT TCA AAA GCC ATT D 111 K P K T. F т K V D F S S F 1888 CTC GCT GAC GCT GTG ATT CTC GCT ACT GGA GCT GTG GCT AAG CGG CTT AGC TTC GTT GGA 1947 G Α K R Α т 1948 TCT GGT GAA GGT TCT GGA GGT TTC TGG AAC CGT GGA ATC TCC GCT TGT GCT GTT TGC GAC 2007 S G G F W N R G I S Α G 2008 GGA GCT GCT CCG ATA TTC CGT AAC AAA CCT CTT GCG GTG ATC GGT GGA GGC GAT TCA GCA 2067 171 I F RNKPL Α V 2127 2068 ATG GAA GAA GCA AAC TTT CTT ACA AAA TAT GGA TCT AAA GTG TAT ATA ATC CAT AGG AGA N F L T K Y G S K V 191 2128 GAT GCT TTT AGA GCG TCT AAG ATT ATG CAG CGA GCT TTG TCT AAT CCT AAG ATT GAT 2187 F R A S K I M Q Q R Α L S N P 211 2188 GTG ATT TGG AAC TCG TCT GTT GTG GAA GCT TAT GGA GAT GGA GAA AGA GAT GTG CTT GGA 2247 S V E A Y G D G E 2307 2248 GGA TTG AAA GTG AAG AAT GTG GTT ACC GGA GAT GTT TCT GAT TTA AAA GTT TCT GGA TTG 251 232 G K V K N V V т G D V S D L K 2308 TTC TTT GCT ATT GGT CAT GAG CCA GCT ACC AAG TTT TTG GAT GGT GGT GTT GAG TTA GAT 2367 A I G H E P A T K F L 2368 TCG GAT GGT TAT GTT GTC ACG AAG CCT GGT ACT ACA CAG ACT AGC GTT CCC GGA GTT TTC 2427 K Р G т T Q 2428 GCT GCG GGT GAT GTT CAG GAT AAG AAG TAT AGG CAA GCC ATC ACT GCT GCA GGA ACT GGG 2487 G D Q D K K Y R Q A I т 311 Α 2488 TGC ATG GCA GCT TTG GAT GCA GAG CAT TAC TTA CAA GAG ATT GGA TCT CAG CAA GGT AAG 2547 E Н Y Q Е I 2548 AGT GAT ATG GCG GAT ACA GCT AGA GGA ACC CAT CAC GAT ATC ATC GGC AGA GAC CAG TAC 2607 351 D T A R G T H H D I I G 2608 CCG ATG ATG GGC CGA GAC CGA GAC CAG TAC CAG ATG TCC GGA CGA GGA TCT GAC TAC TCC 2667 371 M G R D R D Q Y Q M S G R G S 2727 2668 AAG TCT AGG CAG ATT GCT AAA GCT GCA ACT GCT GTC ACA GCT GGT GGT TCC CTC CTT GTT K Α Α т Α V \mathbf{T} Α G G s 391 0 Α

FIGURE 11 (CONT'D)

2728 392		TCC S	AGC S	CTT L	ACC T	CTT L	GTT V	GGA G	ACT T	GTC V	ATA I	GCT A	TTG L	ACT T	GTT V	GCA A	ACA T	CCT P	CTG L	CTC L	2787 411
2788	GTT	ATC	TTC	AGC	CCA	ATC	СТТ	GTC	CCG	GCT	CTC	ATC	ACA	GTT	GCA	CTC	CTC	ATC	ACC	GGT	2847
412	v	I	F	s	P	I	L	v	P	A	L	I	т	v	A	L	L	I	Т	G	431
2848	ттт	СТТ	TCC	тст	GGA	GGG	ттт	GGC	АТТ	GCC	GCT	АТА	ACC	GTT	TTC	тст	TGG	АТТ	TAC	AA g	2907
432	F	L	S	S	G	G	F	G	I	Α	Α	I	Т	v	F	s	W	I	Y	K	451
2908	taag	caca	acatt	ttato	catct	tact	tcat	aatt	ttgt	gcaa	tatg	tgca	tgca	tgtg	rttga	gcca	gtag	rcttt	ggat	caat	2987
2988	ttt	ttgg	gtcga	aataa	acaaa	atgta	acaa	ataag	gaaat	tgca	aatt	ctag	gggaa	acati	tgg	taad	ctaaa	ataco	gaaat	ttga	3067
3068	ccta	gcta	agcti	tgaat	tgtgl	tctgt	gtat	atca	atcta	atata	aggta	aaat	tgctt	ggta	atgai	tacci	tatt <u>e</u>	gattg	gtgaa	atag	3146
3147																				\G	3204
452	Y	A	т	G	Е	Н	P	Q	G	S	D	K	L	D	s	A	R	М	K		470
3205																				ACT T	3264
471	L	G	S	K	A	Q	D	L	K	D	R	A	Q	Y	Y	G	Q	Q	Н	1	490
																			_	agta	
491	G	G	E	Н	D	R	D	R	T	R	G	G	Q	Н	Т	т	*	Hino	1111		507
3328	tga	acta	aaat	gcat	gtag	gtgt	aaga	gctc	atgg	agag	catg	gaat	attg	tatco	cgac	catg	aaca	agtat	aata	actg	3407
3408	ago	tcca	itctc	actt	cttc	tatg	aata	aaca	aagg	atgt	tatg	atata	attaa	acacı	tcta	tctat	gcad	ctta	ttgt	tcta	3487
3488	tga	taaa	tttc	ctct	tatt	atta	taaa	tcat	ctga	atcg	tgac	ggct	tatg	gaat	gctt	caaat	agta	acaaa	aaca	aatg	3567
3568	tgt	acta	taag	actt	tcta	aaca	attc	taac	ttta	gcat	tgtg	aacga	agac	ataa	gtgt	taaga	aagad	cataa	caat	tata	3647
3648	atg	gaag	raagt	ttgt	ctcc	attt	atat	atta	tata	ttac	ccac	ttat	gtat	tata	ttag	gatgt	taag	ggaga	cata	acaa	3727
3728	tta	taaa	ıgaga	gaag	rtttg	tatc	catt	tata	tatt	atat	acta	ccca	ttta	tata	ttata	actta	atcca	actta	ttta	atgt	3807
3808	ctt	tata	aggt	ttga	tcca	tgat	attt	ctaa	tatt	ttag	ttga	tatg	tata	tgaa	aggg	tacta	atttg	gaact	ctct	tact	3887
3888	ctg	tata	aagg	ıttgg	atca	tcct	taaa	gtgg	gtct	attt	aatt	ttati	tgct	tctta	acag	ataaa	aaaa	aaaat	tato	gagtt	3967
3968	ggt	ttga	taaa	atat	tgaa	ggat	ttaa	aata	ataa	taaa	taata	aaat	aaca	tata	atata	atgta	atata	aaatt	tatt	ataa	4047
4048	tat	aaca	ıttta	ıtcta	taaa	aaag	taaa	tatt	gtca	taaa	tcta	taca	atcg	tttag	gcct	tgctq	ggac	gacto	tcaa	ttat	4127
4128	tta	aacg	ragag	rtaaa	cata	tttg	actt	tttg	gtta	ttta	acaa	atta	ttati	ttaa	cacta	atato	gaaat	tttt	tttt	ttta	4207
4208	tcg	gcaa	ıggaa	ataa	aatt	aaat	tagg	aggg	acaa	tggt	gtgt	ccca	atcc	ttata	acaa	ccaa	ette	cacag	gaag	gtca	4287

FIGURE 11 (CONT'D)

4288	ggtcggggacaacaaaaaaacaggcaagggaaattttttaatttgggttgtcttgtttgctgcataatttatgcagtaaa	4367
4368	acactacacataacccttttagcagtagagcaatggttgaccgtgtgcttagcttcttttattttatttttttatcagca	4447
4448	aagaataaataaaataaaatgagacacttcagggatgtttcaacccttatacaaaaccccaaaaaacaagtttcctagcac	4527
4528	cctaccaactaaggtacc	4545
	V nnT	

